UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,708	11/24/2003	Jennifer Fu	200301173-1	6311

22879 7590 03/21/2007	EXAMINER	
HEWLETT PACKARD COMPANY	MITCHELL, JASON D	
P O BOX 272400, 3404 E. HARMONY ROAD		
INTELLECTUAL PROPERTY ADMINISTRATION	ART UNIT	PAPER NUMBER
FORT COLLINS, CO 80527-2400	2193	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/721,708	FU, JENNIFER
	Examiner	Art Unit	
	Jason Mitchell	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 November 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 November 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-21 are pending in this application.

Drawings

2.   Figures 1 and 2 should be designated by a legend such as --Prior Art-- because

only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

Claim Objections

3.   Claims 1 and 11 are objected to because of the following informalities: The

claims recite "a method of block box testing". It is not clear if the use of the word 'block'

is intentional or the result of a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1-2, 5-12 and 15-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The invention as disclosed in claims 1-2, 5-12 and 15-21 is directed to non-statutory subject matter. The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." (State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F.3d at 1373, 47 USPQ2d at 1601-02.)

Specifically, the claims are directed to dividing an application into a plurality of modules and testing the modules. However the language of the claims is such that the results of the testing are never displayed on a device or stored on a tangible medium. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C § 101 for method claims and invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is testing a plurality of modules, which is not a physical transformation.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   **Claims 1-4, 6-14, 16-21 are rejected under 35 U.S.C. 102(b) as being**

anticipated by "End-to-End Testing of IT Architecture and Applications" by

Bocarsly et al. (Bocarsly).

7.   **Regarding Claims 1 and 11:** Bocarsly discloses block box testing in a multi-tier

application environment comprising:

dividing a multi-tier application into a plurality of tier-specific modules (pg. 3, 1st

full para. "For functional testing, points of access include the front-end client, middle tier,

content sources, and back-end databases"); and

testing each of said plurality of tier-specific modules as a black box (pg. 4,

"Functional Tests at the Component Level").

8.   **Regarding Claims 2 and 12:** The rejection of claims 1 and 11 are incorporated,

respectively; further Bocarsly discloses an output from a first tier-specific module of said

plurality of tier-specific modules is used as input to a subsequent tier-specific module of

said plurality of tier-specific modules (pg. 5, 4th para. "data may be accessed and

verified at intermediary stages of transmission between system components").

9.   **Regarding Claims 3 and 13:** The rejection of claims 2 and 12 are incorporated,

respectively; further Bocarsly discloses said output is stored in a computer usable

media prior to use as said input (pg. 5, 4th para. "when data is written to temporary

database tables").

10.   **Regarding Claims 4 and 14:** The rejection of claims 2 and 12 are incorporated,

respectively; further Bocarsly discloses said output is stored, prior to said use as said

input, for a period of time substantially greater than a time that said output is stored

during use of said multi-tier application (pg. 3, 4th and 5th bullets "Test automation,

execution, and tracking"; "Test results evaluation").

11.   **Regarding Claims 6 and 16:** The rejection of claims 1 and 11 are incorporated,

respectively; further Bocarsly discloses at least one of said plurality of tier-specific

modules is tested prior to availability of a preceding tier-specific module (pg. 4, 2nd para.

"Tests are conducted against individual components as the environment is being build").

12.   **Regarding Claims 7 and 17:** The rejection of claims 6 and 16 are incorporated,

respectively; further Bocarsly discloses simulated input is used to test said at least one

of said plurality of tier-specific modules (pg. 9, 2nd para. "XML requests are submitted to

each of the content services").

13.   **Regarding Claims 8 and 18:** The method of Claim 1 further comprising

performing an end-to-end black box test on said multi-tier application (pg. 5, 3rd para.

"When the system has been fully assembled, testing of the environment as a whole can

begin.").

14.   **Regarding Claims 9 and 19:** The rejection of claims 1 and 11 are incorporated,

respectively; further Bocarsly discloses said multi-tier application environment

comprises a utility data center (pg. 3, 2nd para. "front-end client, middle tier, content

sources, and back-end databases").

15.   **Regarding Claims 10 and 20:** The rejection of claims 1 and 11 are incorporated,

respectively; further Bocarsly discloses each of said plurality of tier-specific modules

executes within a single tier of said multi-tier application environment (pg. 9, 2nd para.

"applying ... functional ... testing to each of the content-tier systems separately").

16.   **Regarding Claim 21:** Bocarsly discloses a computer usable media comprising

test output from a tier-specific module, wherein said tier-specific module performs a

portion of a multi-tier application (pg. 5, 4th para. "when data is written to temporary

database tables").

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

18.   **Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable
over "End-to-End Testing of IT Architecture and Applications" by Bocarsly et al.
(Bocarsly).**

19.   **Regarding Claims 5 and 15:** The rejection of claims 2 and 12 are incorporated,
respectively; further Bocarsly discloses:

automatically comparing an output of said first tier-specific module to an input
specification of said subsequent tier-specific module (pg. 5, last full para. "data may be
accessed and verified at intermediary stages of transmission between system
components");

20.   Bocarsly does not explicitly disclose halting said testing if said output does not
meet said input specification.

21.   It would have been obvious to one of ordinary skill in the art at the time the
invention was made to halt said testing if said output does not meet said input
specification because the data is corrupted and the bug has been found (pg. 5, 4th para.
"For cases in which data corruption can be isolated between two data transmission
points, the defective component is localized between those points")

Conclusion

22.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason Mitchell
3/13/07

MENG-AI T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100